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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,380	06/29/2001	Gary L. Graunke	42390P11153	9543

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EXAMINER	
SHIFERAW, ELENI A	
ART UNIT	PAPER NUMBER
2136	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/896,380	GRAUNKE, GARY L.	
	Examiner	Art Unit	
	Eleni A. Shiferaw	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on 12/11/2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

2. Claims 1-21 are presented for examination.

Claim Objections

3. Claim 1 objected to because of the following informalities: in line 3 the limitation requires a semicolon at the end of word "source". Appropriate correction is required.

4. Claim 1 objected to because of the following informalities: in line 9 needs to have an "and" at the end of the limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is not tangibly embodied as it is software per se and/or a carrier wave as disclosed in paragraph 43 of applicant's disclosure. In par. 43, the Applicant explains a machine-readable medium includes floppy diskettes, OD, CD-ROMs, magneto-OD, ROMs... And also the applicant discloses that the **a data signals embodied in a carrier wave or other machine-readable propagation medium...**

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6985591 in view of Hart, III et al. US PG PUBs 2001/0037465 A1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent '591 teaches all the claims limitation except the differences that are underlined in the following table as an example:

09/896380	USPN: 6985591
1. A method comprising: receiving first and second encryption keys from a key server; receiving encrypted video from a broadcast video source; generating a first cipher stream based on the first key for decrypting the encrypted video; generating a second cipher stream based on the second key to re-encrypt the decrypt video; simultaneously decrypting and re-encrypting the encrypted video using a combination of the first and the second cipher streams; and conveying the re-encrypted video to a display device to be decrypted by the display device using the second key. 5. The method of claim 1, wherein receiving the first and second encryption keys comprises receiving one or more of the first key and the second key over a secure authenticated channel. 6. The method of claim 5, wherein receiving a key over a secure authenticated channel comprises receiving the key from a sales server.	17. An apparatus comprising: a secure authenticated channel interface to receive a first key from a sales server for decrypting encrypted multimedia content and a second key from the sales server to re-encrypt the multimedia content, and to send audit information to the sales server; a content interface to receive the encrypted multimedia content; and a computing device to re-encrypt the multimedia content using the first key and the second key and to convey the re-encrypted multimedia content to a sink. 20. The apparatus of claim 18, wherein the secure module generates cipher streams for use by the computing device to decrypt and re-encrypt the encrypted content. 21. The apparatus of claim 17, wherein the computing device conveys the second key to the sink to enable the sink to decrypt the re-encrypted content.

This is a obviousness-type double patenting rejection because the conflicting claims have not in fact been patented since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

The differences between the instant application '380 and patented application '591 is that the instant application '380 has a narrower claim limitation as underlined above and the copending application has broader claim limitations wherein generating the first and second stream ciphers based on first and second key and decrypting and re-encrypting using the first and second cipher streams is claimed in claim 1 of application '380 while same limitation is claimed in dependent claim 20 of patent '591. Sales server of patent '591 is found in dependent claim 6 that further limits the key server to transmit a key of the instant claim '380. Receiving keys over a secure channel of the patent '591 claim 1 is found in dependent claim 5 of the instant claim '380.

The other differences are that the patent '591 adds extra limitations wherein sending audit information to the sales server. However Hart, III et al. US 2001/0037465 A1discloses a method of video/movie data distribution to remote users device in an encrypted/secure communication (0067) when a user makes a payment for the preferred movie a key is sent to user from a key server if the payment is authentic (see 0063-0066) and transaction and usage of requested movie data is exchanged and audited (see 0031).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of the well-known charging and auditing system of Hart, III et al. within the system of patent '591 because they are analogous in multimedia data distribution. One would have been motivated to incorporate the teachings because it would provide a proper charging to user's usage and audit used data based on payment information.

9. Claims 1-21 of the instant application are envisioned by patent No. '591 claims 1-24 in that claims 1-24 of the patent contain all the limitations of claims 1-23 of the instant application. Claims 1-21 of the instant application therefore are not patently distinct from the copending application claims and as such are unpatentable for obvious-type double patenting.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-5 and 7-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. USPG PUBs 2001/0017920 A1 in view of Wright et al. WO 99/12310.

Regarding claims 1 and 12, Son et al. teaches a method/machine-readable medium comprising:

receiving first and second encryption keys from a key server (0029 lines 1-0030 lines 9);

receiving encrypted video from a broadcast video source (0028 lines 1-5; remote server receiving encrypted video);

decrypting the encrypted video (0029 lines 1-5; remote source decrypting the received encrypted video data using private key);

re-encrypt the decrypt video (0029 lines 1-5);

simultaneously decrypting and re-encrypting the encrypted video using a combination of the first and the second cipher streams (first and second keys) (0029-0030 and 0034); and

conveying the re-encrypted video to a display device to be decrypted by the display device using the second key (0031-0032).

Son et al. fails to explicitly disclose generating a first cipher stream based on the first key for decrypting the encrypted video; and generating a second cipher stream based on the second key to re-encrypt the decrypt video.

However Wright et al. discloses encryption (page 13 lines 34-35 and claim 8) and decryption (page 10 lines 24-25) of data using cipher streams that are generated from first key and second key (abstract, claims 6 and 8).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the teachings of Wright et al. within the system of Son et al. because it would securely encrypt communications for transmission over unsecured communications channels and transmit data.

Regarding claim 17 Son et al. discloses an apparatus comprising:

a content interface to receive encrypted video from a broadcast video source (0028 lines 1-5; remote server receiving encrypted video);

a key interface to receive first and second encryption keys from a key server (0029 lines 1-0030 lines 9);

the first key for decrypting the encrypted video (0029 lines 1-9; remote source decrypting the received encrypted video data using private key), a second key to re-encrypt the encrypted video (col. 3 lines 65-67) and to simultaneously decrypt and re-encrypt the received encrypted video using a combination of the first and the second cipher stream (first and second keys) (0029-0030 and 0034); and

a sink interface to convey the re-encrypted video to a display device to be decrypted by the display device using the second key (0031-0032).

Son et al. fails to explicitly disclose a computing device to generate a first cipher stream based on the first key, to generate a second cipher stream based on a second key.

However Wright et al. discloses encryption (page 13 lines 34-35 and claim 8) and decryption (page 10 lines 24-25) of data using cipher streams that are generated from first key and second key (abstract, claims 6 and 8).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the teachings of Wright et al. within the system of Son et al.

because it would securely encrypt communications for transmission over unsecured communications channels and transmit data.

As per claims 2 and 13, Hart, III et al. teaches the method/medium, wherein simultaneously decrypting and re-encrypting the encrypted video comprises exclusive OR-ing the encrypted video with the cipher stream combination (page 7 lines 37-page 8 lines 1, fig. 3 element 122, and page 6 lines 25-28). The rational for combining is the same as claim 1 above.

As per claims 3 and 14, Hart, III et al. teaches the method/medium, teach all the subject matter as described above. In addition Akiyama teach the method, wherein the cipher stream combination comprises a result of exclusive OR-ing the first and second cipher streams (page 7 lines 37-page 8 lines 1, and fig. 3 element 122). The rational for combining is the same as claim 1 above.

As per claims 4 and 15, Son et al. discloses the method/medium, wherein the first key and the second key have symmetric agreement (0030, 0040 and claim 3).

As per claims 5, 16 and 18, Son et al. discloses the method/medium/apparatus, wherein receiving the first and second encryption keys comprises receiving one or more of the first key and the second key over a secure authenticated channel (0021 and 0029).

As per claim 7, Hart, III et al. discloses the method, wherein the secure authenticated channel comprises an Internet connection (0080, 0091 and 0099-0100). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the well-known

internet connection because users request a movie using internet and access movie using internet securely.

As per claim 8, Hart, III et al. discloses the method discloses the method, wherein the secure authenticated channel comprises a telephone line (0120). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the well-known telephone line because users request a movie based on users preference/telephone securely.

As per claims 9 and 20, Son et al. discloses the method/apparatus, further comprising conveying the second key to the display device to enable the display device to decrypt the re-encrypted video (0031).

As per claim 10, Son et al. discloses the method, wherein the encrypted video is publicly available and encrypted with a public key and wherein the first key is a locally available private key (0029-0031).

As per claim 11, Son et al. discloses the method, wherein the encrypted video is a broadcasted entertainment program (0021, and 0045).

As per claim 19 the combination teaches the apparatus wherein the first key and the second key have symmetric agreement (Son et al. 0029-0030) and wherein the combination of the first and the second cipher streams is a result of exclusive OR-ing the encrypted video with an encryption

stream (page 7 lines 37-page 8 lines 1, fig. 3 element 122, and page 6 lines 25-28). The rational for combining is the same as claim 1 above.

As per claim 21, Son et al. discloses the apparatus, wherein the computing device includes a broadcast entertainment set-top box (0021, 0025, 0032, 0037, 0042).

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. USPG PUBs 2001/0017920 A1 and Wright et al. WO 99/12310 and further in view of Hart, III et al. US 2001/0037465.

As per claim 6, Son et al. and Wright et al. teach all the subject matter as described above. Son et al. and Wright et al. fail to disclose receiving key from a sales server. However Hart, III et al. discloses the method, wherein receiving a key over a secure authenticated channel comprises receiving the key from a sales server (see 0063-0066; when a user makes a payment for the preferred movie a key is sent to user from a key server if the payment is authentic).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of the well-known charging and auditing system of Hart, III et al. within the combination system because it would have a secure encrypted channel, and provides proper charging to usages by users and audit used data based on payment information.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A. Shiferaw whose telephone number is 571-272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser R. Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 27, 2007

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3,27,07